Appl. No. 09/608,560
Amdt. Dated 9/7/2004
Reply to Office Action of July 6, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2.   (Cancelled).

3.   (Currently Amended) The apparatus of claim 12 wherein the signature generator further comprises:

a signer coupled to the decryptor to sign the data using the platform private key, the platform private key being transparent to the platform.

4.   (Currently Amended) The apparatus of claim 12 wherein the platform-specific transformer comprises:

an Exclusive OR (XOR) device to perform an XOR function on the platform identifier and the authentication identifier.

5.   (Currently Amended) The apparatus of claim 12 wherein the platform-specific transformer comprises:

a decryptor to decrypt the authentication identifier using a symmetric encryption/decryption key generated from the platform identifier.

6.   (Currently Amended) The apparatus of claim 12 wherein the authentication identifier is generated by a platform-specific reverse transformer which transforms the encrypted platform private key using the platform identifier, the encrypted platform private key being encrypted from the platform private key using the authentication private key.

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7.   (Original) The apparatus of claim 6 wherein the platform-specific reverse transformer comprises an Exclusive OR (XOR) device to perform an XOR function on the encrypted platform private key using the platform identifier.

8.   (Original) The apparatus of claim 4 wherein the platform identifier is a unique, serially uncorrelated bit stream.

9.   (Original) The apparatus of claim 6 wherein the platform-specific reverse transformer comprises an encryptor to encrypt the encrypted platform private key using a symmetric encryption/decryption key generated from the platform identifier.

10.   (Currently Amended) The apparatus of claim 1<u>2</u> wherein the platform identifier is installed in the first storage in a protected environment.

11.   (Original) The apparatus of claim 10 wherein the protected environment is a system management basic input/output system table.

12.   (Currently Amended) ~~The~~ <u>An</u> apparatus ~~of claim 4 wherein~~ <u>comprising</u>:
<u>a first storage to store a platform identifier unique to a platform;</u>
<u>a second storage to store an authentication identifier, the authentication identifier being provided by an authentication vendor using the platform identifier, a platform private key, and an authentication private key; and</u>
<u>a signature generator to generate a digital signature for data using the platform identifier and the authentication identifier, the signature generator comprises</u>
        <u>a platform-specific transformer to transform the authentication identifier using the platform identifier to output an encrypted platform private key,</u> the platform specific transformer ~~further~~ comprises a reporting device to report the platform identifier to generate a tracked platform identifier<u>, and</u>
        <u>a decryptor coupled to the platform-specific transformer to decrypt the encrypted platform private key to generate the platform private key using an authentication public key, the authentication public key being provided by the authentication vendor.</u>

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13.   (Currently Amended) The apparatus of claim 1<u>2</u> wherein the platform identifier is a processor serial number retrieved from a processor.

14-19. (Cancelled).

20.   (Currently Amended) The method of claim 2~~19~~ wherein generating the digital signature further comprises:

signing the data using the platform private key, the platform private key being transparent to the platform.

21.   (Currently Amended) The method of claim 2~~19~~ wherein transforming the authentication identifier comprises:

performing an Exclusive OR (XOR) function on the platform identifier and the authentication identifier.

22.   (Currently Amended) The method of claim 2~~19~~ wherein transforming the authentication identifier comprises:

decrypting the authentication identifier using a symmetric encryption/decryption key generated from the platform identifier.

23.   (Currently Amended) The method of claim 2~~19~~ wherein the authentication identifier is generated by transforming the encrypted private key using the platform identifier, the encrypted private key being encrypted from the platform private key using an authentication private key.

24.   (Original) The method of claim 23 wherein transforming the encrypted private key using the platform identifier comprises performing an XOR function on the encrypted platform private key and the platform identifier.

25. (Original) The method of claim 21 wherein the platform identifier is a unique, serially uncorrelated bit stream.

26. (Original) The method of claim 23 wherein transforming the encrypted private key comprises encrypting the encrypted private key using a symmetric encryption/decryption key generated from the platform identifier.

27. (Currently Amended) The method of claim 29~~18~~ wherein storing the platform identifier comprises installing the platform identifier in a protected environment.

28. (Original) The method of claim 27 wherein the protected environment is a system management basic input/output system table.

29. (Currently Amended) A ~~The~~ method ~~of claim 21 wherein~~ comprising:
storing a platform identifier unique to a platform and an authentication identifier in first and second storages, respectively, the authentication identifier being provided by an authentication vendor using the platform identifier, a platform private key, and an authentication private key; and
generating a digital signature for data using the platform identifier and the authentication identifier by
transforming the authentication identifier using the platform identifier to output an encrypted platform private key, said transforming ~~of~~ the authentication identifier further comprises ~~:~~reporting the platform identifier to report a tracked platform identifier, and
decrypting the encrypted platform private key to generate the platform private key using an authentication public key provided by the authentication vendor.

30-34. (Cancelled).

35. (Currently Amended) A computer program product comprising:
a machine readable medium having computer program code therein, the computer program product comprising:

computer readable program code for storing a platform identifier unique to a platform and an authentication identifier in first and second storages, respectively, the authentication identifier being provided by an authentication vendor using the platform identifier, a platform private key, and an authentication private key; and

computer readable program code for generating a digital signature for data using the platform identifier and the authentication identifier, the computer readable program code for generating digital signature comprises:

computer readable program code for transforming the authentication identifier using the platform identifier to output an encrypted platform private key, the computer readable program code for transforming the authentication identifier further comprises computer readable program code for reporting the platform identifier to generate a tracked platform identifier, and

computer readable program code for decrypting the encrypted platform private key to generate the platform private key using an authentication public key provided by the authentication vendor.

36.   (Cancelled).

37.   (Currently Amended) The computer program product of claim 3~~5~~6 wherein the computer readable program code for generating the digital signature further comprises:

computer readable program code for signing the data using the platform private key, the platform private key being transparent to the platform.

38.   (Currently Amended) The computer program product of claim 3~~5~~6 wherein a computer readable program code for transforming the authentication identifier comprises:

computer readable program code for performing an Exclusive OR (XOR) function on the platform identifier and the authentication identifier.

39. (Currently Amended) The computer program product of claim 3̶5̶6 wherein a computer readable program code for transforming the authentication identifier comprises:

computer readable program code for decrypting the authentication identifier using a symmetric encryption/decryption key generated from the platform identifier.

40. (Currently Amended) The computer program product of claim 3̶5̶6 wherein the authentication identifier is generated by a computer readable program code for transforming the encrypted private key using the platform identifier, the encrypted private key being encrypted from the platform private key using an authentication private key.

41. (Original) The computer program product of claim 40 wherein a computer readable program code for transforming the encrypted private key and the platform identifier comprises performing an XOR function on the encrypted platform private key and the platform identifier.

42. (Currently Amended) The computer program product of claim 3̶5̶8 wherein the platform identifier is a unique, serially uncorrelated bit stream.

43. (Original) The computer program product of claim 40 wherein a computer readable program code for transforming the encrypted private key comprises a computer readable program code for encrypting the encrypted private key using a symmetric encryption/decryption key generated from the platform identifier.

44. (Original) The computer program product of claim 35 wherein the computer readable program code for storing the platform identifier comprises computer readable program code for installing the platform identifier in a protected environment.

45. (Original) The computer program product of claim 44 wherein the protected environment is a system management basic input/output system table.

46.   (Original) The computer program product of claim 38 wherein a computer readable program code for transforming the authentication identifier further comprises:

computer readable program code for reporting the platform identifier to generate a tracked platform identifier.

47.   (Original) The computer program product of claim 3~~6~~5 wherein the platform identifier is a processor serial number retrieved from a processor.

48-53. (Cancelled).

54.   (Currently Amended) The system of claim ~~6~~53 wherein the signature generator further comprises:

a signer coupled to the decryptor to sign the data using the platform private key, the platform private key being transparent to the platform.

55   (Currently Amended) The system of claim ~~6~~53 wherein the platform-specific transformer comprises:

an Exclusive OR (XOR) device to perform an XOR function on the platform identifier and the authentication identifier.

56.   (Currently Amended) The system of claim ~~6~~53 wherein the platform-specific transformer comprises:

a decryptor to decrypt the authentication identifier using a symmetric encryption/decryption key generated from the platform identifier.

57.   (Currently Amended) The system of claim ~~6~~53 wherein the authentication identifier is generated by a platform-specific reverse transformer which transforms the encrypted

platform private key and the platform identifier, the encrypted platform private key being encrypted from the platform private key using the authentication private key.

58.   (Original) The system of claim 57 wherein the platform-specific reverse transformer comprises an Exclusive OR (XOR) device to perform an XOR function on the encrypted platform private key and the platform identifier.

59.   (Original) The system of claim 55 wherein the platform identifier is a unique, serially uncorrelated bit stream.

60.   (Original) The system of claim 57 wherein the platform-specific reverse transformer comprises an encryptor to encrypt the encrypted platform private key using a symmetric encryption/decryption key generated from the platform identifier.

61.   (Currently Amended) The system of claim 63 52 wherein the platform identifier is installed in the first storage in a protected environment.

62.   (Original) The system of claim 61 wherein the protected environment is a system management basic input/output system table.

63.   (Currently Amended) A The system of claim 55 wherein comprising:

a platform having a unique platform identifier (ID); and

a digital signature system coupled to the platform to authenticate data, the digital signature system comprising:

a first storage to store the platform identifier,
a second storage to store an authentication identifier, the authentication identifier being provided by an authentication vendor using the platform identifier, a platform private key, and an authentication private key, and

a signature generator to generate a digital signature for data using the platform
identifier and the authentication identifier, the signature generator comprises

a platform-specific transformer to transform the authentication identifier
using the platform identifier to output an encrypted platform private key, the
platform-specific transformer further comprises ;a reporting device to report the
platform identifier to generate a tracked platform identificr, and

a decryptor coupled to the platform-specific transformer to decrypt the
encrypted platform private key to generate the platform private key using an
authentication public key, the authentication public key being provided by the
authentication vendor.

64.   (Currently Amended) The system of claim 6352 wherein the platform identifier is
a processor serial number retrieved from a processor.

65-68. (Cancelled).